

# ***TR8.8 Broadband Data Standards***

Tom Hengeveld,  
Senior Scientist,  
Harris RF Communications  
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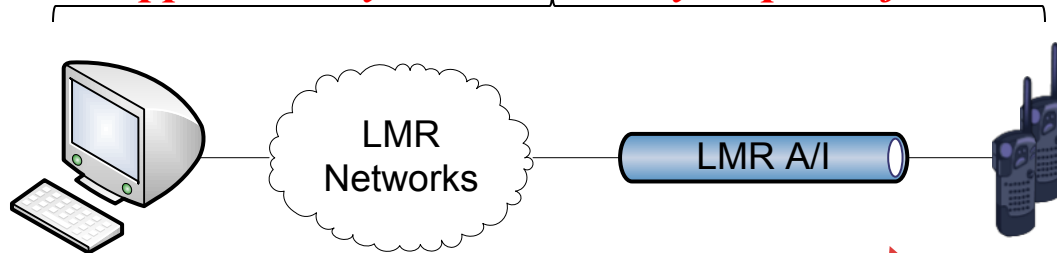
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- **Broadband Data Standards**
    - Embarking on a project to standardize
      - Services and Application protocols
      - System and Supporting data/definitions
      - Protocol test specifications
- For a subset of NPSTC/ERIC Defined Broadband Applications
- Brief discussion of motivation and status

# ***In the beginning was the pipe, And the pipe was narrow...***

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***(1) Primarily voice communications with  
“supplementary services”, very dispatch focused***



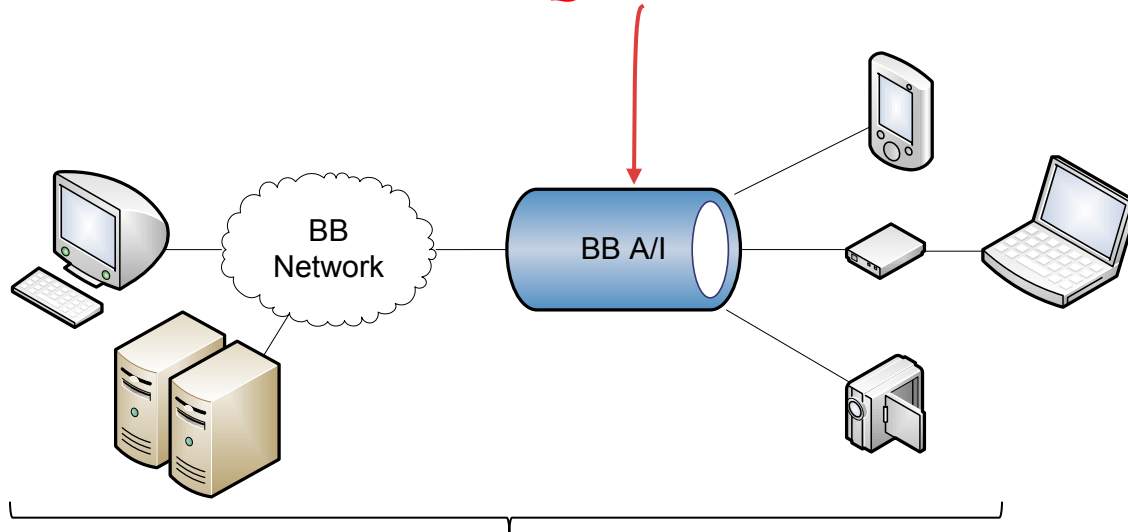
***(2) Narrow Pipe: Many design  
decisions effected by lack of  
effective bandwidth. Air  
Interface driven design.***



# And the FCC said, let there be a 700 MHz Public Safety LTE network...



*(1) Fatter Pipe, variable bit rate, advanced QOS etc.*



- The BB network is much more capable.
- There are people that know how to enable different organizations to exchange data.
  - All over the country;
  - With low latency;
  - With high bandwidth;
  - And Securely.

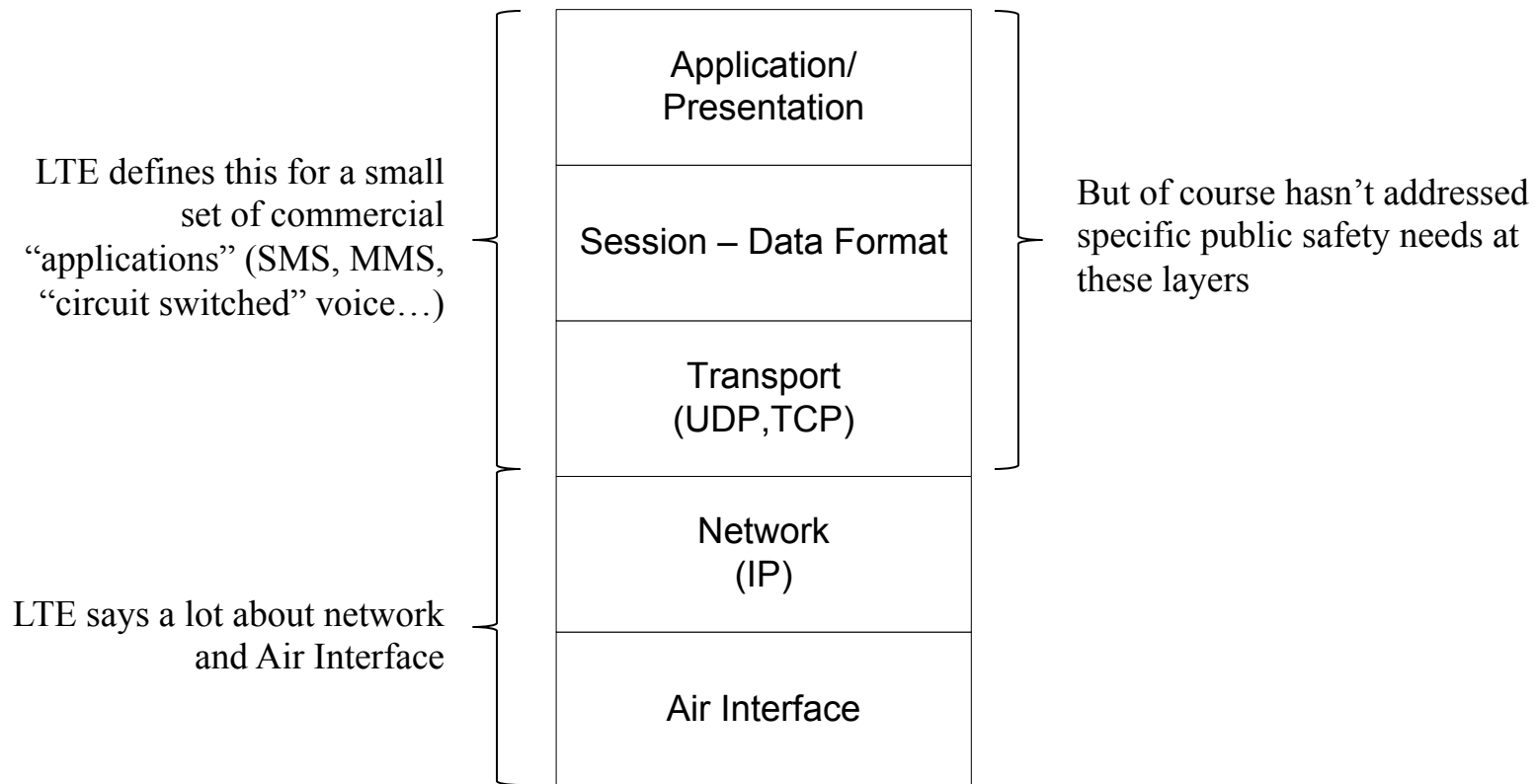
*(2) A great deal of focus on access to servers, communication between clients. “Networky” thinking rather than A/I.*

**...that all my duly designated public safety entities might share information and be interoperable...**

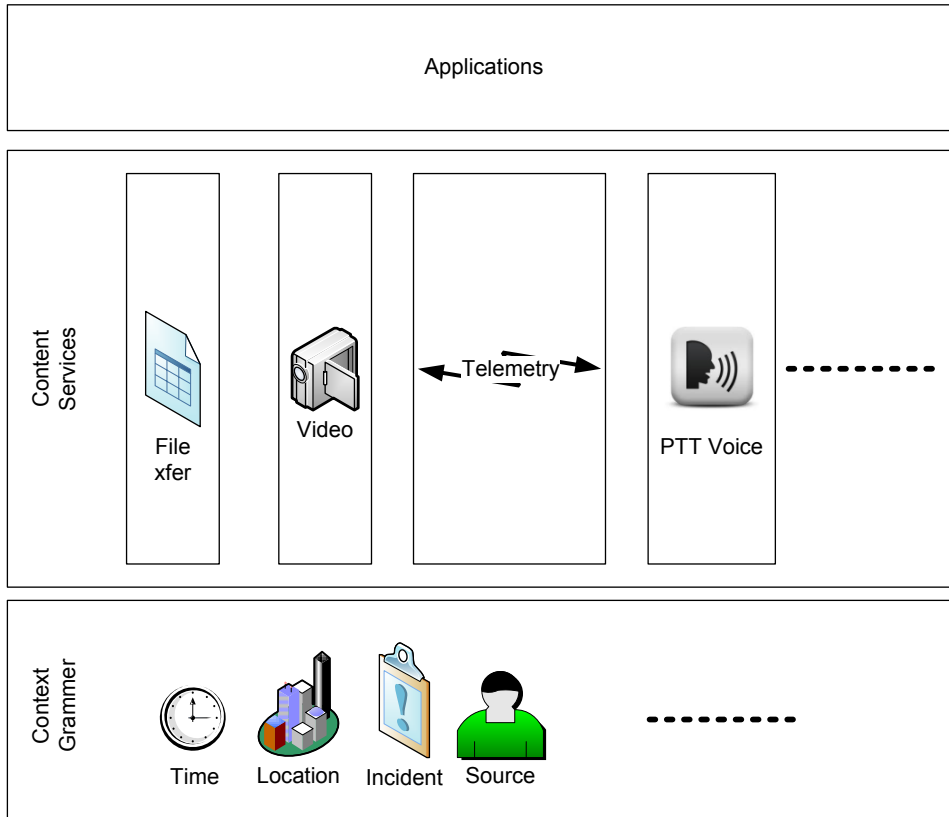
# ***In order for applications to be interoperable...***



***...they need to “speak the same language” at every layer.***



# Or put another way....



To enable advanced applications.



And apply those representations to content service protocols...



We need to define the foundational representations for "context metadata" (session layer) and related information

# NPSTC/ERIC Applications Possible Standardization Venues



Public  
Safety  
Standards



Commercial  
Standards

## Unique PS “Applications”

- Emergency
- (Group) Video (1:n across all Media, including group messaging)
- File Transfer
- LMR Voice
- Incident Management Tools (Access to ICS Responders)
- Telemetry
- Location based data capabilities

*These are good choices for TR8.8, as they leverage the committee’s history and knowledge.*

*Currently taking up “File Transfer” and “LMR Voice” as test cases.*

## Field Servers using BB as IP Transport

- LMR Gateways
- Field Based Server Applications

*Probably not immediately interesting. FBSA looks like static IP and move on. Gateways with BB transport are probably not time critical.*

## Generic Network Stuff

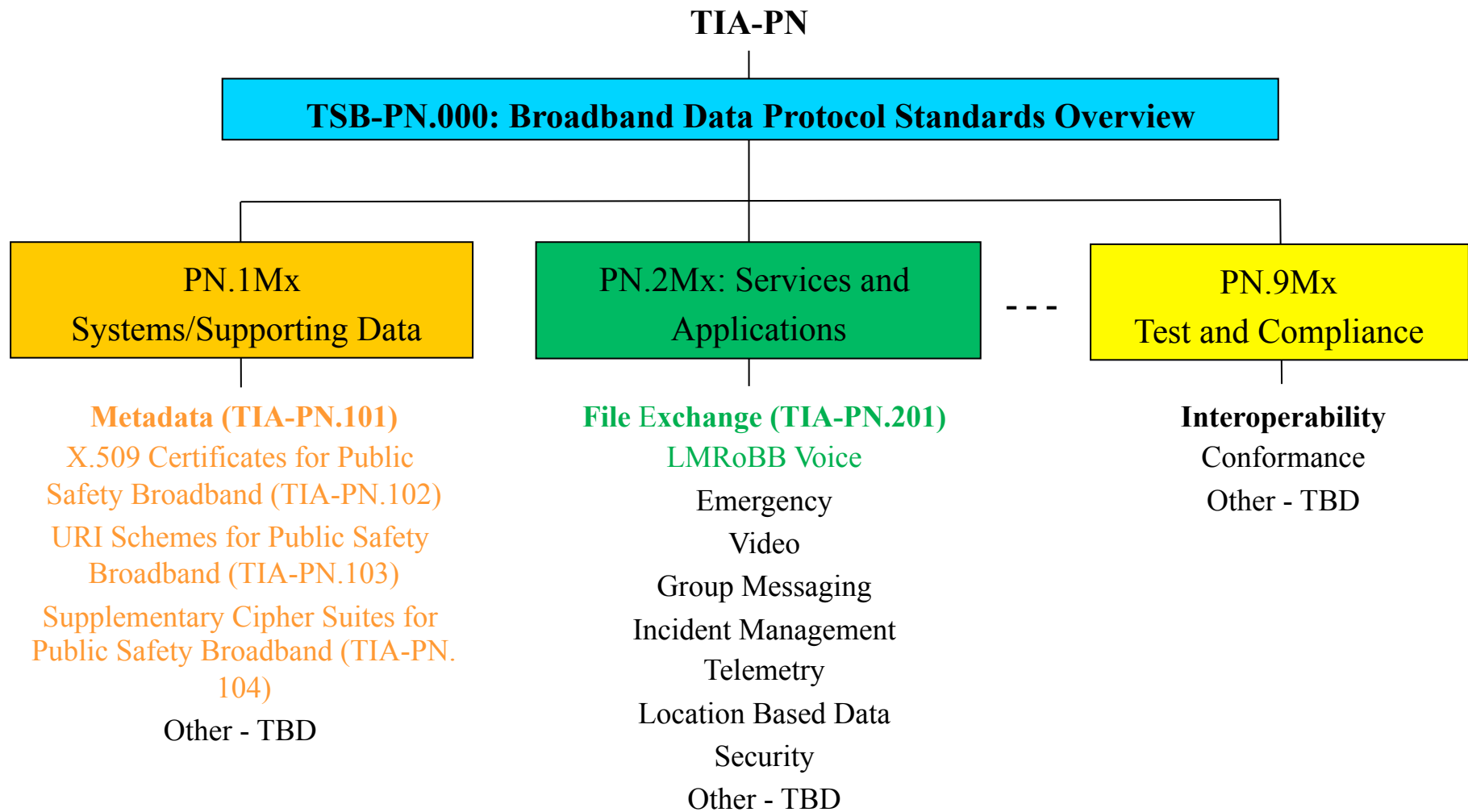
- Welcome Page
- Internet
- VPN

*More appropriately done in other standards bodies (e.g. ATIS), FCC should be encouraged to codify particular standards for these functions. May wish to have liaison on certain issues (like GPS format).*

## Cellular Telephony

- CMAS – Commercial Mobile Alert
- Text (SMS-MMS)
- PSTN Voice

# Document Hierarchy





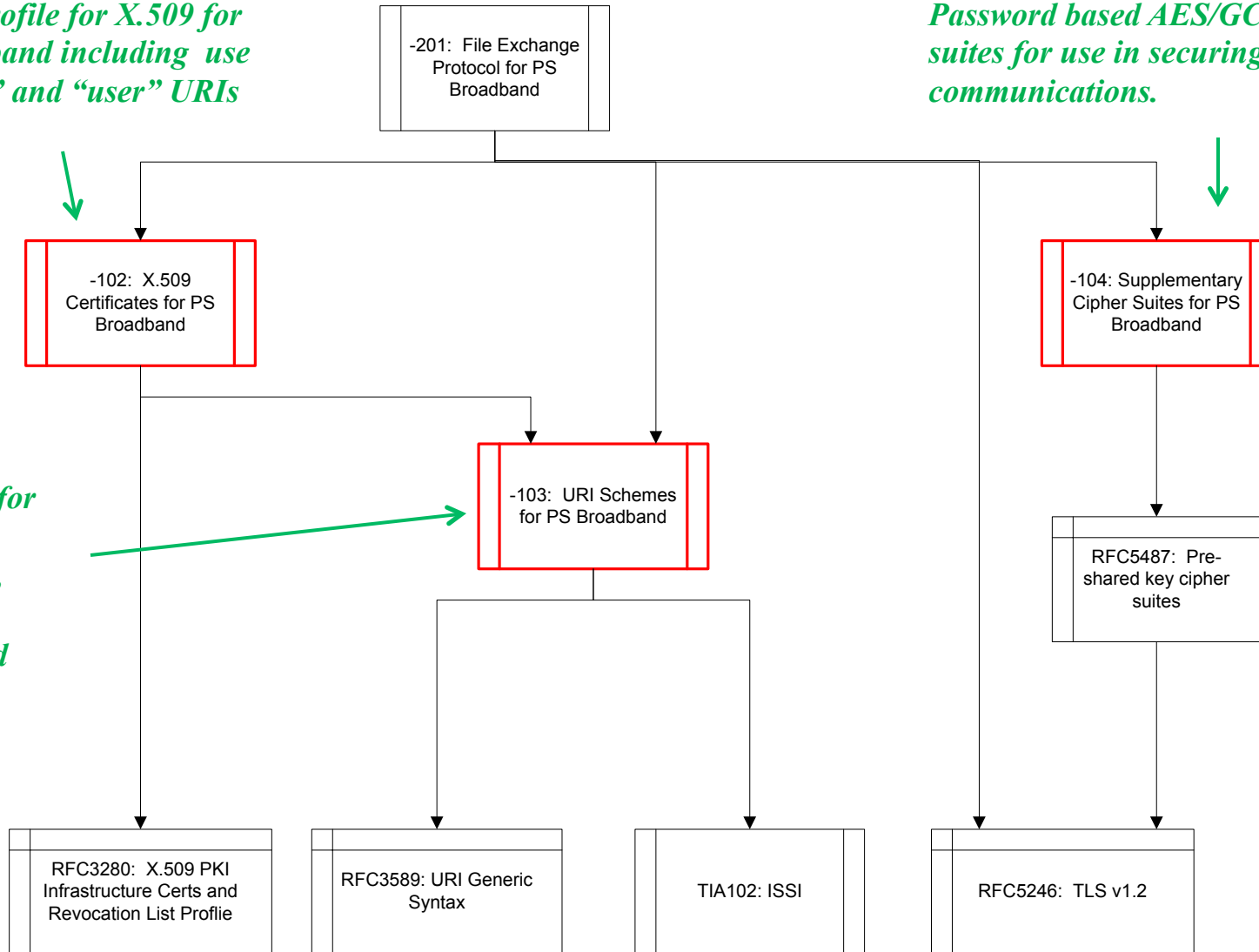
# So Far...



*Specific profile for X.509 for PS Broadband including use of “group” and “user” URIs*

*Password based AES/GCM cipher suites for use in securing “ad-hoc” communications.*

*URI Schemes for “users”, “groups”, and pre-positioned keys.*



# Status



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- TIA Project number assignment is in queue
  - Overview Document Submitted for Comment
  
  - Expect additional contributions in the next few weeks
    - File Xfer and related specs (Harris)
    - LMR Voice (Cossidian)

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***Thanks.***